2: Jochelson E-5 (1884-1902) 1933 Yakut

(*Coregonus leucichtys, C. Omul, C. Muksun, C. clupoides*), the chief catch of the natives on the shores of Okhotsk and Bering seas consists of salmon of the genus *Oncorhynchus;* the dog salmon (*O. lagocephalus* or *O. keta*), the humpback salmon (*O. proteus* or *O. horbusha*), the red salmon (*O. lycaodon* or *O. niarka*), the chawicha (*Salmo orientalis*), and some others. With the migrating fish coming from the Arctic Ocean belong also the starlet (*Acipenser ruthenus*) and the sturgeon (*Acipenser sturio*). 136

Many coregonidae and other species of fish live continuously in the Arctic rivers and in the numerous tundra lakes.

Population of the Polar Region

The population to the north of the Verkhoyansk Ridge is very small. This region has only 0.01 man to a quadratic mile, or 1 man to 100 square miles. Settlements are confined to the river valleys and the shores of large lakes abounding in fish. The tundra dweller of Siberia seldom settles on the seacoast or on the adjacent islands, as do the American Eskimo. Since off shore the sea is quite shallow the hunting of sea mammals has not been developed; for instance, the ocean between the mouth of the Kolyma River and the Sviatoi Nos to the west is only seven meters deep at a distance of ten or twenty miles from shore. West of the Chukchee are no sea-going peoples and no skin boats. Late in the fall, when snowstorms begin to rage on the tundra, the nomadic natives wander southward to the protection of the forests. 161 634 131 [361]

The Chukchee and Yukaghir are regarded as indigenous tribes of the region. The Tungus were forced to the Arctic region when the Yakut, migrating from the south, occupied Yakut Province. In their turn, the Yakut crossed the Verkhoyansk Ridge when the Russian conquerors invaded the Lena country and were followed to the Arctic region by Russians who settled at the mouths of the rivers. The climate is unfit for agriculture, but the Yakut introduced horned cattle and horses. Cattle-breeding, however, also encounters many obstacles: the grasses are of poor quality, the haying and fishing seasons coincide, and for nine months of the year the soil is covered with a deep layer of snow. In spite of the abundance of fish, famines are frequent, owing to lack of cooperation, methods of conservation, and foresight. The basic economic foundation of Arctic Siberia is the domesticated reindeer. The Yakut, as well as all the other tribes of the region, both aboriginal and immigrant, are endeavoring to acquire the reindeer, an important factor in their welfare. [221] [511]

2: Jochelson E-5 (1884-1902) 1933 Yakut

000 Kolymsk every summer, bringing flour and other commodities for sale or exchange for furs.

Cultivation of Meadows

246 231 221 The cultivation of meadows consists in the use of grass land for the maintenance of horses and horned cattle. The long and severe winters necessitate the storage of food for domestic animals and hay is the only available forage in Yakutsk Province. In summer the animals are put out to pasture. The meadows are extensively exploited. The grass is cut with sickles. It is of poor quality because none is sown. The quantity of hay needed for the long winter is enormous and the entire short summer is devoted to haymaking. The hay is of uneven quality. There are many late over-ripe grasses; some of the hay is cut during the rain and is consequently an unsubstantial food for the animals. There are no exact data on the quantity of hay usually stored, but, according to some investigators of Yakut economic life, they obtain about 50 per cent of the necessary hay. Despite vast areas of grass lands, the domestic animals will continue to suffer from the scarcity of hay until grass sowing is introduced.

Domestic Animals

233 178 *Horse and Cattle Breeding.* The first travelers and investigators of Yakut Province reported that the primary occupation of the Yakut was the breeding of horses and horned cattle. Driven from the south to their present abode by Mongol-Buryat hordes, the Yakut wandered with their droves of horses and herds of large horned cattle. The former inhabitants of the country, forced farther south by the Yakut, continued their hunting life, and at the same time kept their reindeer and driving dogs.

Historical data for the last two centuries show that the two branches of Yakut animal industry have developed in the direction of increasing the number of horned cattle at the cost of the number of horses. Originally, horse-breeding predominated among the Yakut, now the number of horned cattle is much larger than that of horses.

The following table shows the average number of horses and horned cattle in the three southern districts (Olekminsk, Yakutsk and Viliuisk) for the years 1901–1910 and 1917.

	1901–1910	1917	1925
Horned cattle	304,851	482,005	
Horses	108,942	128,465	
Total	413,793	610,470	536,589

6: Sauer--130 [2] G-5 (1785-94) 1802 Yakut
116, 221, 251, 411, 224

"About the 25th of June, at the conclusion of their holidays, they commence their summer occupation by collecting a great supply of the inner bark of the pine and birch, which they dry on racks in their huts: hay-making and fishing then occupy the time till berries are ripe, when they collect an immense quantity, and boil to preserve them. In the beginning of October they kill their winter stock of cattle for food, and let it freeze, which preserves it fresh and good; of course they save so much hay. In October and November they catch fish under the ice. Toward the end of the latter month, they go out on the chase: for wolves and foxes they place in their tracks poisoned baits of corrosive sublimate, which they call sullima, and also of nux vomica (Tshillebucha); besides having traps set, spring bows, &c. They are very expert archers, and have a plentiful supply of arrows in their quivers."

24: Wrangell--51 G-3 (1820-23) 1842 Yakut
116, 221

"The population [RCH: near Saschiwersk on the Indigirka River] consists chiefly of Jakuti, who during the summer tend their numerous horses and their few cattle in the best pastures, employing themselves at the same time in collecting a store of hay for the winter. When the autumn arrives they move to the river, and devote themselves almost entirely to fishing, the chase being quite a subordinate employment. Those who have neither cattle nor horses live entirely by fishing, and make use of dogs with light sledges to draw their fish and their firewood home."

40: Burr--152 N-2 (no date) 1931 Yakut
116, 221, 805

"Their principal occupations are hunting, fishing and cattle-breeding. They live in wooden huts for the greater part of the year, for the seven winter months which in their tongue are distinguished by numbers instead of names, sure evidence of the sameness of the long frost; but on the arrival of spring they moved into lighter quarters, and in the summer often live in wigwams. These five months have names of their own, signifying the 'dropping of foals,' the 'month of sowing,' 'the harvest,' and so on. Their chief domestic animals are the horse and the reindeer; it is the latter which chiefly supplies them with transport, meat, milk and clothing, but in Vilhuy and some other suitable districts they are occupied in cattle-breeding."

45: Lesseps--304-305 T-2 (1788) 1790 Yakut
116, 221

" When summer commences, they leave their winter habitations, and with their families, and a small number of horses, go to make their harvest of fodder for consumption during the frost season. They repair to a considerable distance from their yourt, and to the most fertile cantons. In their absence, the horses are left to the care of the servants, and the neighbouring pas- [305] tures serve for the maintenance of all their herds."

46: Cottrell--138 T-2 (1840) 1842 Yakut
116, 221, 262, 342, 354

"They are a more sedentary people than most of their neighbours, and only migrate to find fresh pasture for their cattle once a year. Their summer huts are made of birch bark, of which strips are sewed together with horsehair. In autumn they return to their wooden sheds in the forests adjacent to the meadows where the hay is made and stacked up. These are covered over with a thick coating of cowdung, which keeps them warm, and they are not troubled with the smoke, from having chimneys which carry it away. These are wooden pipes well guarded from the fire by a thick plaster of clay and cowdung. The hut contains one window, always to the right of the entrance, which is filled up with a large block of transparent ice, which they scrape clean from the rime frost which attaches itself to it, when the pipe is stopped up at night. Their usual beverage in summer is the kumysse, made of fermented mares'-milk, which the Kirghis also drink, and their food consists of the thin under skin of the larch or fir boiled with fresh milk or curds. The richer classes eat butter and fat with it; many of them have a hundred cows and horses."

55:Popov E-5 (no date) 1964 RV2 Yakut RV2
Dolgan

and Muna on the Lena; the Edzhen group lived on the lower reaches and the Dongot group on the upper reaches of the Olenek. The ancestors of the Karyntuo probably also lived on the Olenek.

Clans with the name Dolgan and Edyan (Edzhen) were commonly found among the Evens and Evenks. For example, Dolgan clans are known in the regions of the Anadyr' and Gizhiga, on the Kamchatka and Okhotsk coast; Edzhen clans are known in the Aldan Basin, around the Ayan on the Okhotsk coast, and so on.

During the 18th century the ancestors of the present-day Dolgans migrated to the northwest, the Dolgan groups moving to the rivers Popigay and Khatanga, the Dongot and Edzhens to the Noril'sk Lakes region, and the Karyntuo to the Boganida River basin. Those left on the Lena became part of the local Yakut naslegs as separate clans.

The first Yakut settlers appeared at the end of the 17th century in the Khatanga Basin on the river Kheta, and from then on the influx continued to increase. In the 18th century these Yakuts formed into the Lower Tundra Yakut Volost.

Even before the Yakuts—at the beginning of the first half of the 17th century—the rivers Pyasina, Dudypta, Boganida, Kheta, and Khatanga were settled by Russian hunters and trappers who founded the ancient Russian population of these places, subsequently known as tundra peasants. They were chiefly concerned with fishing, and to a lesser extent with hunting. It was from them in particular that the Dolgans and Nganasans learned to set pitfall traps for the polar fox. The influence of their Russian neighbors has long been evident in the dwellings and everyday life of the Dolgans, that is to say, during the migration to the Taymyr.

During the 18th and 19th centuries the gap between the culture and everyday life of the different groups of the population in this territory began to narrow. The Yakut language became predominant and was absorbed not only by originally Tungus groups, but also by a large number of tundra peasants. Intermarriage swept away the former barriers between the Evenks, Yakuts and Russians to an ever greater extent.

The system of tsarist administration was no different here from what existed in any other part of Northern Siberia. The Dolgans, Yakuts and Evenks had to pay the fur-tax as "natives" and formed "clans" headed by princelings, while the tundra peasants were forced to pay a poll tax, were formed into a "community" and headed by an elder. People living many hundreds of kilometers away from the nearest centers were economically dependent on the merchants who monopolized supplies to the region, bought up all the furs, and cruelly exploited the population.

Economy and Everyday Life

The main occupations of the Dolgans of the past were reindeer-breeding, hunting, and, in certain regions, fishing. Until quite recently the Dolgans were still leading a nomadic life. Their nomadizing was basically of two types. In the region of the Noril'sk Lakes and in the basin of the Popigay, they retained a more archaic system of nomadizing and did not leave, generally speaking, the forest-tundra belt, but kept to the forest-covered river valleys in the winter, and wandered back to the bare steppes for the summer. The winter camps of other groups of Dolgans stretched along the forest-tundra belt from Lake Pyasino to the lower reaches of the Popigay. These were typical "edge-of-the-forest" dwellers. The winter was spent in the forest-tundra with slight deviations south of the northern boundary of the forest vegetation, while the summer was passed in the tundra,

55:Popov E-5 (no date) 1964 RV2 Yakut RV2
• Dolgan

somewhat to the north of this boundary. The migration from winter to summer camps and back was made in the spring or fall. 221

In winter, the families of Noril'sk and Popigay Dolgans lived apart from one another, often singly. The remainder still continued to nomadize along the northern edge of the forest and formed the chain of "stations" of the winter Noril'sk-Popigay highway; this consisted of groups of 5-10 households, some of the stations comprising groups of permanent dwellings. But since reindeer require frequent change of pasture, the camps of separate families and the entire stations, and the reindeer-herders living in the Russian-type houses as well, had to change their place of residence several times during the course of the winter. 361 221

As spring approached and the camps broke up, the Dolgans formed into nomadic groups. These groups were combined on a territorial basis and were bound by common economic interests. Associations of this kind meant that a smaller number of herdsmen was required for the reindeer since it took fewer people to look after a large herd than several small ones. In the spring, as soon as the grass appeared, and in the summer, during the season of the mosquitoes and other harmful insects, the Dolgans watched their herds the whole day through, appointing sentries from each household in turn. The nomadic Dolgans wandered along lakes, rivers and mountains. In the autumn, when the insects disappeared, each group of nomads divided up once more into separate families, which then nomadized in the region of their polar-fox traps, setting them again for the winter, or else hunted singly for wild reindeer until it was time to go back to the camps. [233]

The reindeer-breeding of the Dolgans combined the traditions of the Tungus breeding for purposes of riding, with devices and techniques borrowed from the herders of the Samoyedic groups. Thus, the Dolgans used reindeer both for riding and carrying (in summer) and at the same time made extensive use of reindeer sled-teams (in winter). But even in the first half of the 19th century the Dolgans in some parts only used their reindeer for riding. The various types of sleds are fundamentally similar to the Nenetsh and Nganasan types, but they also have the Yakut type with its low, straight staves. The harnessing technique differed from that of the Nentsy; the lead reindeer is harnessed and controlled by the rein on the right, whereas among the Nentsy, Entsy and Nganasans the lead reindeer is harnessed and controlled by the left-hand rein (it should be noted in this connection that the Evenks and Dolgans, even when riding reindeer, mount from the right and also guide it from the right). The system of milking reindeer, typical of the Evenks, was retained by the Dolgans; like the Nentsy and Nganasans they also used herd dogs. The saddles and riding techniques of the Dolgans were of the Tungus type. 233 177 492 [171]

The Dolgans hunted polar fox, wild reindeer and various wildfowl including duck, geese and partridge. Until quite recently they still used bows and arrows for the purpose, obtaining them from the Kets, via the Russians, and also from the Yakuts and southern Evenks. The Dolgans also had self-triggered bows for killing reindeer, which they set up in the forest preserves east of the Khatanga. According to legend, in the remote past the Dolgans used to hunt reindeer with slings and throwing-arrows. 224 [173]

The Dolgans attributed great importance to collective reindeer spearing in the autumn at river crossings, and to various hunting techniques with guns (which replaced the old bow and arrow). In the winter, the animals were hunted by means of specially trained decoy reindeer. In the winter they hunted reindeer with guns and bows and arrows almost entirely by the chasing technique: 4 strong reindeer were harnessed to a light sled and the herd was trailed for hours on end. Another form of winter hunting

55:Popov E-5 (no date) 1964 RV2 Yakut RV2
Dolgan

The personal property of the collective-farm members includes herds of reindeer (up to 100 head), transport equipment, vertical nets, hunting guns and hunting and fishing tackle. Reindeer-herding remains the chief branch of the economy, but is now done in accordance with good animal husbandry practice. A reindeer technician and a veterinary assistant are attached to each team, which looks after a subherd.]

The Dolgan reindeer-herders on the collective farms pasture the herds in good grazing ground, far from the herding tent by day, and as night falls drive them back to the tent. Having rested, the reindeer at midnight begin to feed near the tent; at dawn they are driven to new feeding grounds some distance away. This grazing system, on the one hand, keeps the reindeer well fed and, on the other hand, they do not stray during the night and are easy to watch. Twenty-four-hour-a-day, year-round guarding of the reindeer has become a rule in collective herding.

[The herd of reindeer is constantly growing. Thus, in the Avamskiy Rayon, the number of reindeer increased over the last five-year period, by more than 50%. The necessity of yearly migrations along the tundra from Dudinka to the Anabar has been eliminated; previously this had a most unfavorable effect on Dolgan reindeer-herding. The demand for pack-reindeer has been reduced, due to the carriage of goods into the Avamskiy and Khatangskiy Rayons by the Northern Sea Route; from here they are brought to remote inland points by steamboat or cutter. Previously, the only route connecting the Dudinka with the Avamskiy and Khatangskiy Rayons in the winter was the reindeer highway from Dudinka to Popigay. Connections are now maintained winter and summer by airplane, although reindeer transport is still of some importance. Its technology is unchanged.

[Hunting technology has been reconstructed. Traps are set in the autumn before the beginning of the blizzards. For this purpose, hunting brigades sometimes journey to the north for several hundred kilometers into the taiga, spending the nights in sled-tents with iron stoves. Hunting brigades are made up before the beginning of the season, traps being distributed on the basis of 150–200 pitfall traps and 10 springtraps per hunter. With the first snow the brigades go out into the tundra and begin to hunt wild reindeer. Foxtraps are baited with the surplus meat obtained. In the Khatangskiy Rayon alone, where the majority of the hunters are Dolgans, the collective farms during the 1948–49 season set 5000 new pitfall traps and prepared 1000 bait-pits for foxes, in which they placed more than 40 tons of bait.

[Fox-hunting begins on November 15th. Springtraps are placed by experienced hunters at places where wild reindeer have been killed in the autumn, or on the bloody tracks of wounded wild reindeer near bait-pits, or previously discovered burrows. Hunting is the main source of income for Dolgan collective farms. The previous predatory methods have gone out of use—spearings, stockades, geese nets. Fishing has become important in a number of areas. Vegetable-gardening and animal husbandry (other than reindeer) have developed on many Dolgan collective farms. The members grow chiefly radishes, cabbage and onions.

[A process of settling down the previously nomadic population is in progress. In the new settlements where the collective-farm members whose work does not make them nomadic live, dwelling-houses of the Russian type have been built, along with various other farm and public buildings. Many settlements have their own electric stations.]

The members of reindeer-herding and hunting brigades lead a nomadic life. Their families frequently travel with them. Separate nomadic groups are now set up, not on the basis of individual relations among different

55:Popov E-5 (no date) 1964 RV2 Yakut RV2
Dolgan

Kindergarten on a walk. Taymyr National Okrug, Khatangskiy Rayon.

families, but on the initiative of the collective-farm administration, and their routes are determined in the same way. Fishing brigades sent to fish in some river or lake lead a settled life there, partly in houses built by the collective farm at the fishing grounds.

[The Dolgans, particularly the descendants of the tundra peasants, had Russian cottages even before the Revolution. They now build sturdy houses, using both imported lumber and driftwood. The old-fashioned pole tent is now used only in the summer.

[The Dolgan diet now includes bread, flour, and tea, boiled strong and taken with sugar. Supplies are brought in regularly to the local stores. Medical aid is available at 40 medical and medical-assistant points. The Dolgan-Yakut population is served by hospitals at Noril'sk and in the settlements of Chernoye, Volochanka and Khatanga. In 1953 there were 52 schools, including 3 seven-year schools, in the Taymyr National Okrug. The Dolgan-Yakut population is served by schools at Chernoye, Dolgany, Volochanka, Kheta, Khatanga, Popigay and other points.